cahps® Surveys and Tools to Advance Patient-Centered Care

20th Anniversary 1995 - 2015

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Sorting Fact from Fiction: The Value of Patient Experience Measurement

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Monday October 5 3:30-5:00

Crystal Gateway Marriott Hotel and Convention Center

What is Patient-Centered Health Care?

The US Institute of Medicine defines patient-centered care as:

> "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions."

Source: Institute of Medicine. *Crossing the Quality Chasm, 2001.*

Why We Should "Listen" to Patients?

- Respect for patients should be an integral part of care
- Health care that promotes good patient experiences is important for achieving:
  - Strong provider-patient relationships and trust
  - Continuity of care and treatment fidelity
  - Better outcomes
- Patient experiences are measurable
  - New surveys address conceptual and practical concerns about measuring "satisfaction"
  - Emphasis on reports vs. evaluations
- Valid surveys of patient experience provide important information to patients and providers
  - Patient reports discriminate among clinics, systems, markets, regions and countries
  - Patient reports are associated with other indictors of care quality
  - Patient reports are useful for focusing and evaluating improvement efforts

CAHPS

(Consumer Assessment of Healthcare Providers and Systems)

National, multi-institutional, collaborative project launched in 1995 with financing from AHRQ

www.cahps.ahrq.gov

Rationale for CAHPS

- Many surveys but no standardization
- Little comparative data
- Science uneven and fragmented

CAHPS Features

- Public domain
- Emphasis on “report” questions
- Patient reports and ratings of experiences – not “satisfaction”
- Standardized core items applicable for different care systems and patient types; adult and child versions
- Supplemental items or modules for special populations or applications
- Available in multiple languages

Ratings Versus Reports

Ratings

- Subjective
- Confounded With Attitudes Towards Caregiver
- Non-specific

Reports

- More Objective
- Easier to Interpret
- Actionable

CAHPS Survey Development

- Literature review and review of existing measures
- Input from patients; focus groups
- Stakeholder feedback
- Input from Technical Expert Panels
- Rigorous translation process
- Development and testing of reporting strategies
- Field testing

Validity Assessment

- Focus groups
- Cognitive testing
- Psychometric assessment
  - Reliability (internal consistency) and factor analyses
  - Discriminant validity
  - Construct validity

CAHPS Family of Surveys

Facility Surveys

Hospital
In-Center Hemodialysis
Nursing Home

Ambulatory Care Surveys

Clinician & Group (CG-CAHPS)
Health Plan
Surgical Care
ECHO® (Behavioral health)
American Indian
Home Health Care

Other CAHPS Specialized Surveys

- Children with special health care needs
- Dental Care
- Assisted living
- Cancer care
- Accountable Care Organizations
- Chiropractic
- Persons with mobility impairment
- Patient-Centered Medical home
- Health Information Technology
- Health literacy
- Cultural sensitivity

Current Use of CAHPS

- NCQA uses CAHPS for accreditation
- Centers for Medicare & Medicaid Services (CMS)
- Many others such as states, coalitions, states, purchasers
- Over 130 million Americans enrolled in health plans that collect CAHPS data
- Over 3 million Americans complete CAHPS surveys each year

CMS Use of CAHPS Surveys

- HCAHPS
- Surveys based on CG-CAHPS
  - Accountable Care Organizations (ACOs)
  - Physician Quality Reporting System (PQRS)
- Surveys based on CAHPS Health Plan Survey
  - Medicare FFS, Medicare Advantage, PDP
  - Qualified Health Plan (QHP) for Health Insurance Marketplace plans
  - Medicaid and SCHIP
- Other surveys
  - Home Health (HHCAHPS)
  - In-Center Hemodialysis (ICH CAHPS)

Myths about CAHPS

1. Consumers lack expertise to evaluate care quality
2. Patient “satisfaction” is not valid or actionable
3. Provider emphasis on improving patient experiences leads to inappropriate, ineffective, inefficient care
4. There is an inevitable tradeoff between good patient experiences and high-quality clinical care
5. Patient scores cannot be fairly compared across hospitals, plans, or providers
6. Patient experience surveys response rates are low; only patients with extreme experiences respond
7. There are faster, cheaper, and better ways to survey patients

Source: Price, Elliott, Cleary, Zaslavsky, Hays; JGIM, 2014

Myth 1: Consumers Lack Expertise to Evaluate Care Quality

But evidence shows that…

- CAHPS surveys *only* ask about patient experience, not technical aspects of care
- Patients are best source of information on communication, access, and other issues covered by CAHPS surveys
- CAHPS items complement measures of technical quality, which combined provide *overall* assessment of hospitals, providers or plans
- CAHPS surveys shown to be reliable and valid for assessing patient-centered care
- Patients are the only source of some process of care measures (e.g., were things explained in a way you could understand)

Myth 2: Patient "Satisfaction" Is Not Valid or Actionable

But evidence shows that…

- CAHPS survey questions ask about *specific* experiences of care
- Surveys are tailored to key aspects of the care experience
- CAHPS surveys capture patient experiences in hospitals, health plans, physicians' offices, nursing homes, hemodialysis centers, hospices, and other settings
- HCAHPS scores improved since national implementation and continue to improve

Myth 3: Improving Patient Experiences Leads to Worse Care

But evidence shows that…

- Awareness of patient experiences helps providers to appropriately address patients' requests
- There are effective strategies to promote positive experiences even when patients' requests require discussion
- Patient assessments of care are more strongly associated with the nature of provider communication than with patients' receipt of desired treatment

Myth 4: There Is a Tradeoff between Good Patient Experiences and Quality Clinical Care

But evidence shows that…

- Quality is multidimensional; individual indicators may or may not reflect quality of care in other areas
- Dozens of studies show positive or null associations between patient experiences and adherence to best clinical processes, lower hospital readmissions, and desirable clinical outcomes
- While one study (Fenton et al.) found that patients who reported better provider communication and overall ratings of care had high expenditures, inpatient admissions, and mortality, methodological challenges may undermine its results (Xu et al. 2014)

Myth 5: Patient Scores Cannot Be Fairly Compared across Hospitals, Plans or Providers

- Unadjusted comparisons do have limitations
  - Patient characteristics unrelated to care (e.g., age, education, illness severity) can influence how patients respond to survey questions or how care is delivered
  - The uneven distribution of these characteristics across hospitals or plans can influence rankings
- Patient/case-mix adjustment addresses these limitations
  - Removes the effects of patient characteristics that vary across providers or plans
  - Ensures that reports and ratings are comparable and reduces incentives to avoid patients most likely to report problems
- CAHPS surveys employ case-mix/patient-mix adjustment informed by 20 years of research
  - Also see Cleary et al. (2014)

Myth 6: Patient Experience Survey Response Rates Are Low and Respondents Unrepresentative

But evidence shows that…

- Recent CAHPS surveys response rates: 31% to 61% national averages
- No consistent relationship between a survey's nonresponse rate and nonresponse bias when best practices of survey methodology (such as HCAHPS) are followed
- To ensure nonresponse bias does not affect overall comparisons:
  - CAHPS surveys use standardized methodologies
  - Case-mix/patient-mix adjustment models compensate for bias when comparing hospitals (HCAHPS), physicians and groups (CG CAHPS) and health plans (MA & PDP CAHPS)

Myth 7: There Are Faster, Cheaper, and Better Ways to Survey Patients

But evidence shows that…

- While online reviews, open-ended questions, single-item surveys, and customized provider surveys may be useful for expediently informing providers' internal quality improvement efforts…
  - Systematic and standardized measurement is needed to ensure fair comparisons between providers for the purposes of public reporting and pay-for-performance

Patient Experience and Other Health Care Quality Measures: Patient Behavior

- Zolneriak & Dimatteo (2009) meta-analysis of 127 studies shows:
  - **Higher nonadherence** among patients whose **physicians communicate poorly**
  - **Substantial improvements in adherence** among patients whose **physician participated in communication skills training**
- Better **patient-reported provider communication** related to higher:
  - Diabetics' **adherence to hypoglycemic medication** (Ratanawongsa et al., 2013)
  - Veterans' **diabetes self-management** (Heisler et al. 2002)
  - Blacks' **hypertension medication adherence** (Schoenthaler et al. 2009)
  - Breast cancer patients' **adherence to tamoxifen** (Kahn et al. 2007;Liu et al. 2013)
  - Rates of **colorectal cancer screening** (Carcaise et al. 2008)
  - **Preventive health screening** and **health counseling services** (Flocke et al. 1998)
- Greater **patient trust in physician** related to:
  - Better **adherence to diabetes care** recommendations (Lee & Lin 2009)
  - More **preventive services** among low-income Black women (O'Malley et al. 2004)

Source: Price, Elliott, Zaslavsky, Hays et al.; MCRR 2014

Patient Experience and Other Health Care Quality Measures: Clinical Processes

- Jha et al. (2008) find that **hospitals with highest HCAHPS scores** do **better on clinical processes of care measures**, including acute myocardial infarction (AMI), congestive heart failure (CHF), pneumonia, and surgery than hospitals with lowest scores
- Patients' **overall ratings of hospitals** positively associated with **hospital performance on pneumonia, CHF, AMI, and surgical care** (Isaac et al. 2010) and **process indicators for 19 different conditions** (Llanwarne et al. 2013)
- **Overall ratings and willingness to recommend hospital** lower in hospitals that consistently perform poorly on **cardiac process measures** (Girota et al. 2012)
- Measures of **outpatient experiences of care and care processes are mixed**
  - There may be difficulty matching provider being assessed and provider giving the care

Patient Experience and Other Health Care Quality Measures: Clinical Outcomes

- Positive **patient experiences** may provide unique benefit to **clinical outcomes for AMI patients** over and above clinical quality performance:
  - Meterko et al. (2010): Better **patient-centered hospital care** associated with better **1-year survival,** controlling for comorbidity, clinical, and demographic factors
  - Glickman et al. (2010): Higher **patient ratings** associated with lower **hospital inpatient mortality**, controlling for hospitals' clinical performance
- Providers **may pay greatest attention to patients near the end of life**, which would lead to paradoxical negative association between patient-provider communication and patient outcomes
  - Elliott et al. (2013) may partially explain Fenton et al. (2013) reported negative relationship with patient-provider communication with all providers seen in last year and total health care and prescription drug spending, inpatient admissions, and mortality

Patient Experience and Other Health Care Quality Measures: Efficiency

- Brousseau et al. (2004): Longer **waits for primary care pediatric visits (access)** related to more **non-urgent emergency department (ED) visits**
- Clark et al. (2008): Children with asthma whose **physician reviewed long-term therapeutic plan** have fewer **ED visits, urgent office visits, and hospitalizations**
- Schulman and Staelin (2011): higher **overall patient ratings of hospitals' care and discharge planning** associated with lower **30-day readmission rates for AMI, heart failure, and pneumonia**

Patient Experience and Other Health Care Quality Measures: Safety

- Isaac et al. (2010) show that more positive **patient experiences** associated with fewer **inpatient care complications**, especially pressure ulcers, post-operative respiratory failure, and pulmonary embolism or deep venous thrombosis
  - Notably, better patient-reported **cleanliness of hospital environment** strongly related to lower **prevalence of infections due to medical care** in the hospital
- Saman et al. (2013) reported significant relationship between better patient-reported **hospital staff responsiveness** and decreased likelihood of **central line-associated blood stream infections**
- **Hospitals** whose patients report better **experiences** also have **employees** with more positive perceptions of **patient safety culture** (Lyu et al. 2013; Sorra et al. 2012)

Patient Experience and Other Health Care Quality Measures: Conclusions

- With few exceptions, research shows better patient care experiences are positively associated with adherence to recommended prevention and treatment processes, better clinical outcomes, better patient safety, fewer readmissions, and less health care utilization
  - Evidence is strongest in the inpatient setting
- When patient experience measures are psychometrically sound, use recommended sample sizes and adjustment processes, they are valuable complements to clinical process and outcome measures in pay-for-performance and public reporting programs

Can CAHPS Scores be Improved?

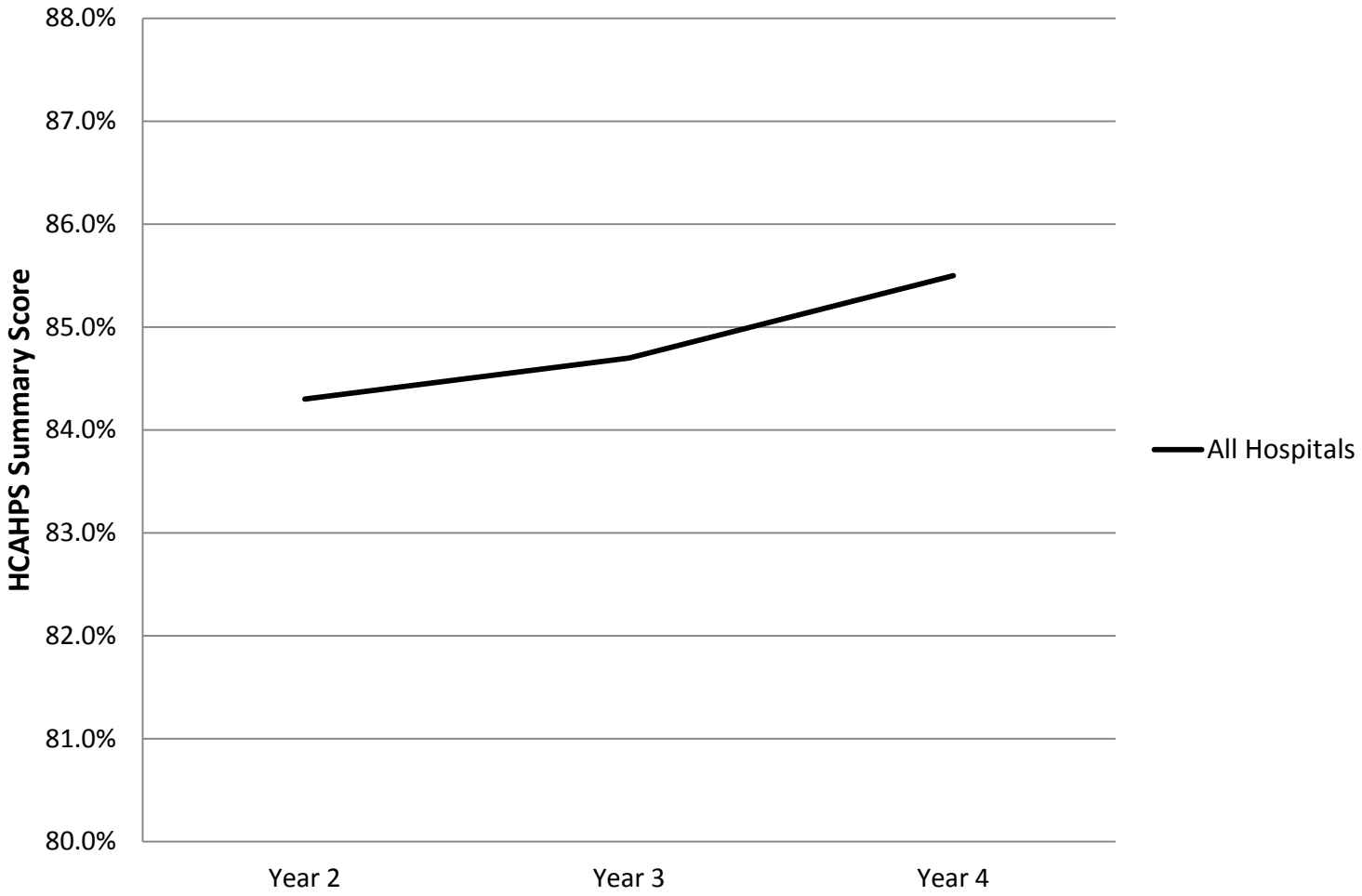
- Previous research found small, uniform improvement in HCAHPS scores in the first year of public reporting among ~2,700 initially participating hospitals
  - Elliott, Lehrman, Goldstein, Giordano, Beckett, Cohea, Cleary. Health Affairs, 2010.
- We assessed the extent and uniformity of improvement in HCAHPS scores in the 2nd through 4th years of public reporting among 3,691 participating hospitals
  - Elliott, Cohea, Lehrman, Goldstein, Cleary et al.; HSR 2015

Study Design

Changes in HCAHPS scores from Year 2 to Year 4 among 3,691 participating hospitals ~7 million patient surveys

- HCAHPS results were first publicly reported in March 2008 for patients discharged from October 2006 - June 2007
- BASELINE: 5th quarterly public reporting in March 2009 for discharges from July 2007 - June 2008
- END: 13th quarterly public reporting in April 2011 for discharges from July 2009 - June 2010

Overall Improvement, Year 2 to Year 4



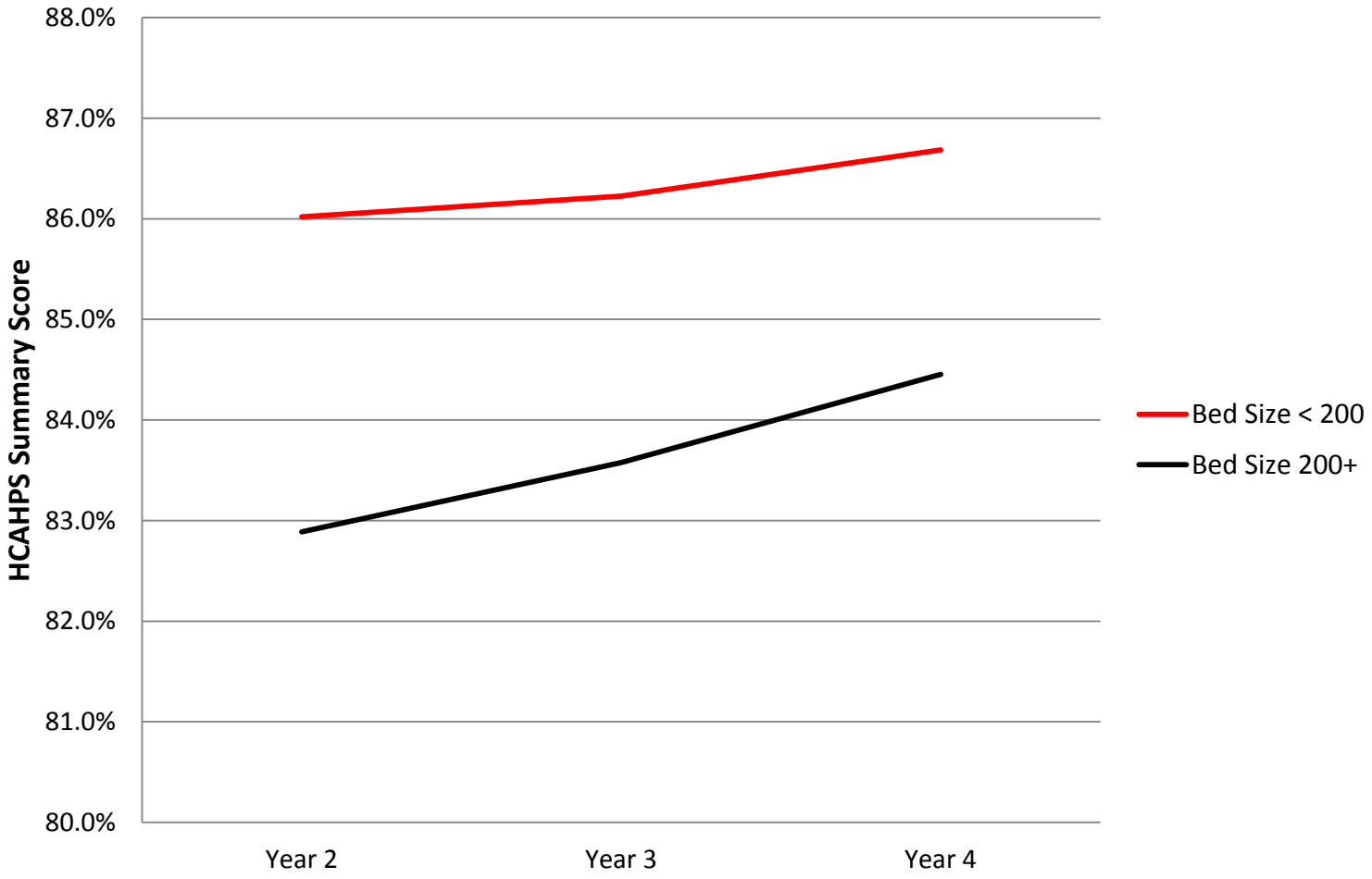
Improvement Varied Across Hospitals

- After accounting for regression-to-the-mean, (shrunken) changes Year 2 to Year 4 ranged from a 4.4% loss to a 6.5% gain for the middle 95% of hospitals
  - (z=-1.3 to +1.9 in hospital-level SDs)
- Disattenuated correlations of Year 2 and Year 4 hospital scores = 0.91
  - ~17% of Year 4 hospital scores reflect true differential improvement since Year 2

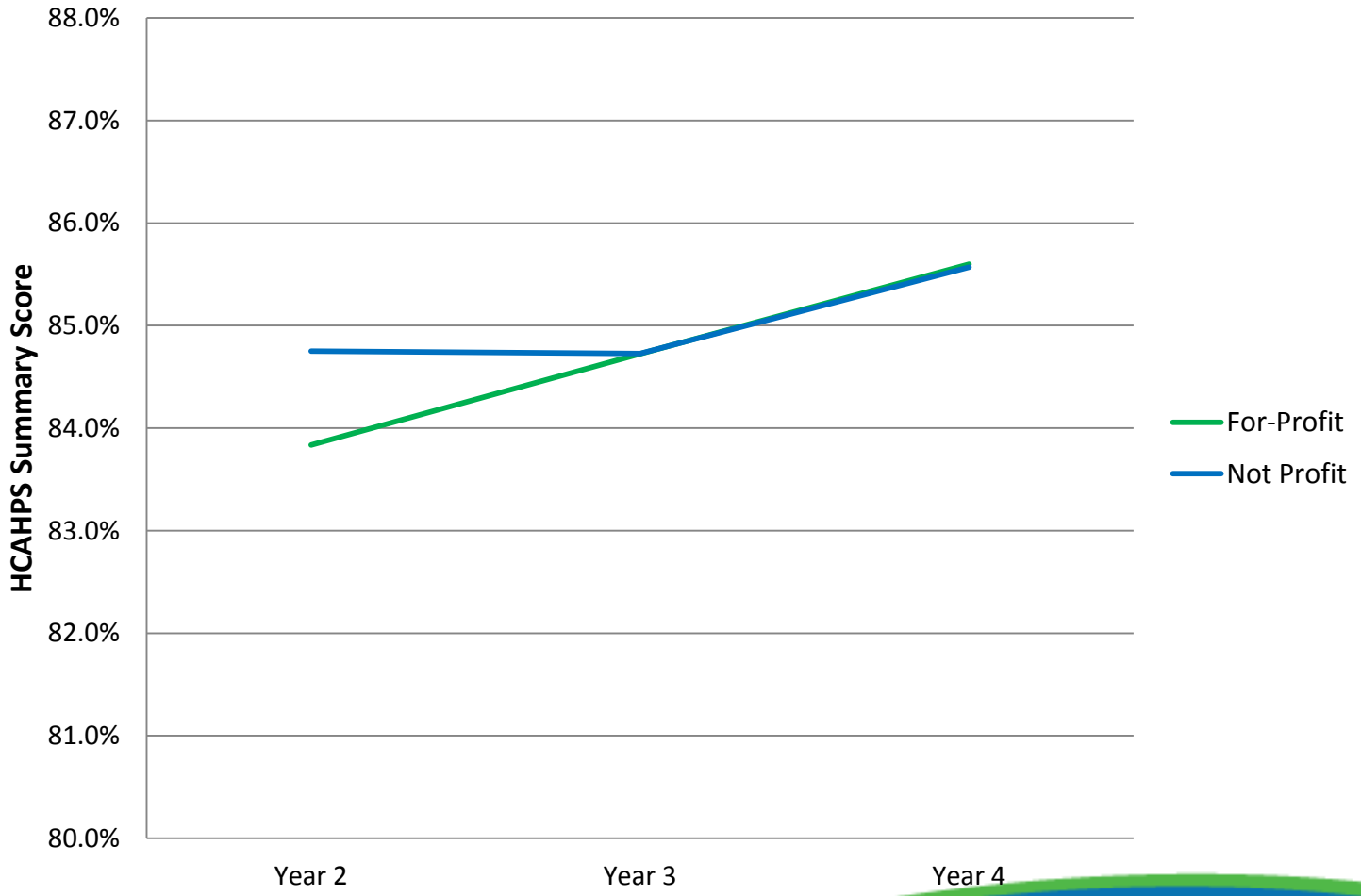
Larger and For-Profit Hospitals Improved More than Counterparts

- 200+ bed hospitals had lower mean scores in Year 2, but they improved more than smaller hospitals
- F**or-profit hospitals** had lower mean scores in Year 2, but they improved more than non-profit hospitals
- Independent factors; additive effects

More Improvement in Larger Hospitals



More Improvement in For-Profit Hospitals



Conclusions: Accelerating but Differential Improvement

- Continuous public reporting (from March 2008) and anticipation of Hospital Value-Based Purchasing (*Patient Protection and Affordable Care Act* enacted March 2010) focused attention on HCAHPS and may have motivated hospitals to improve
  - Especially among hospitals whose scores had lagged initially
- Larger, for-profit hospitals have greater resources to implement quality improvement efforts

Medicare Beneficiaries and Smoking

- Smoking is the 2nd highest risk factor for morbidity and mortality in the US (3rd highest globally)
  - Aggravates existing chronic conditions
- 8% of US seniors (65+) smoke (2011 National Health Interview Survey)
- National Guidelines Clearinghouse recommends that smokers receive advice to quit smoking at every physician visit

Source: Winpenny, Elliott, Haas, Haviland, Orr, Shadel, Ma, Friedberg, Cleary; HSR, In Press

Physician Incentives: Giving smokers advice to quit smoking

- Patient-reported experience of care measures in Medicare
  - Used in Pay for performance for Medicare Advantage
  - Publically reported
- Smokers may not want to hear smoking cessation advice
- Concern about receiving poor experience of care scores may lead providers to not provide recommended advice
  - Opiods, ABX also

Research Questions

- How frequently are senior smokers advised to quit?
  - Are some senior smokers more likely to receive such advice?
- Do smokers who always receive advice to quit report different experiences of care than those not advised to quit?
  - Receiving advice to quit may be part of high quality care in all domains
  - Indirect effect
- Do smokers who receive advice to quit report better or worse experiences *with their primary physician* than those not advised to quit?
  - After controlling for experiences of care in other domains
  - Physician-specific measures would be affected more if there is a direct effect

2012 Medicare CAHPS Data

- Nationally representative sample of Medicare beneficiaries in FFS or MA, 65+
  - Data from 26,432 Smokers who
    - Had a visit in prior 6 months
    - Responded to Advise to Quit question (94.5%)

- 12 Patient Experience Measures
  - (10) Experiences with Medical Care and Health (Rx) Plan
    - Access, customer service, care coordination, etc.
  - (2) Experiences with Physicians
    - Global Rating
    - Doctor Communication

Analyses

- Bivariate analyses of Always Receiving Advice to Quit
  - Gender, age, race/ethnicity
  - Education, census division
  - Smoking frequency
- Overall Patient Experience and Advice to Quit: Multivariate regression
  - Standard Case-Mix adjustment (demographics, state, Medicaid, proxy)
  - Frequency of smoking, presence of 6 chronic conditions, live alone
  - MA contract, PDP, and/or FFS Medicare
  - All patient experience measures transformed to 0-100 scale

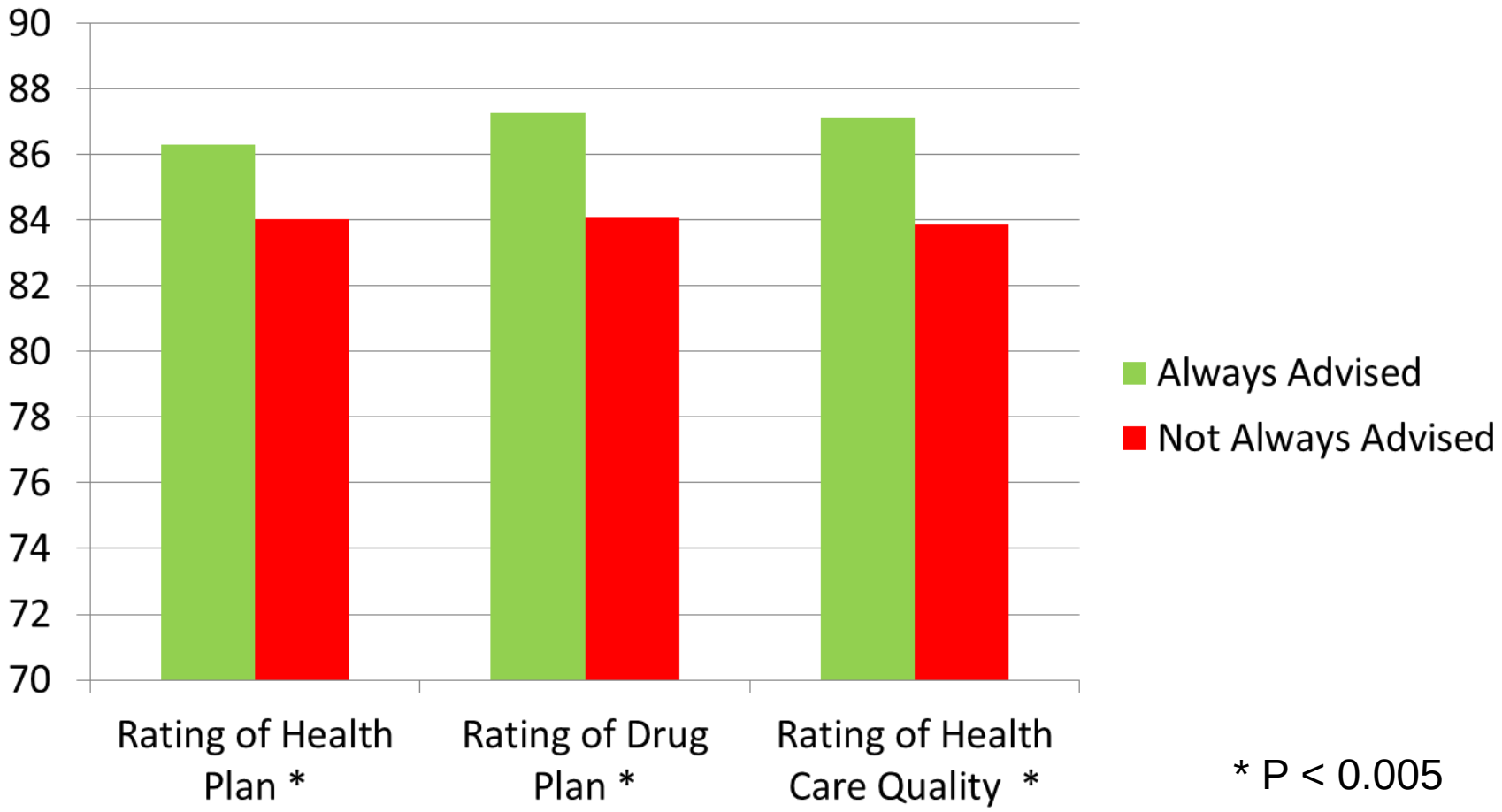
Always Advised to Quit?

Group	% Always Advised to Quit
Overall	**36.8%**
Women	**39.2%**
Men	34.7%
65-69	**39.3%**
80-84	31.7%
85+	23.3%
White	35.6%
Black	**41.0%**
Hispanic	**43.8%**

Group	Always Advised to Quit
New England	**45.6%**
W N Central	30.7%
E S Central	28.9%

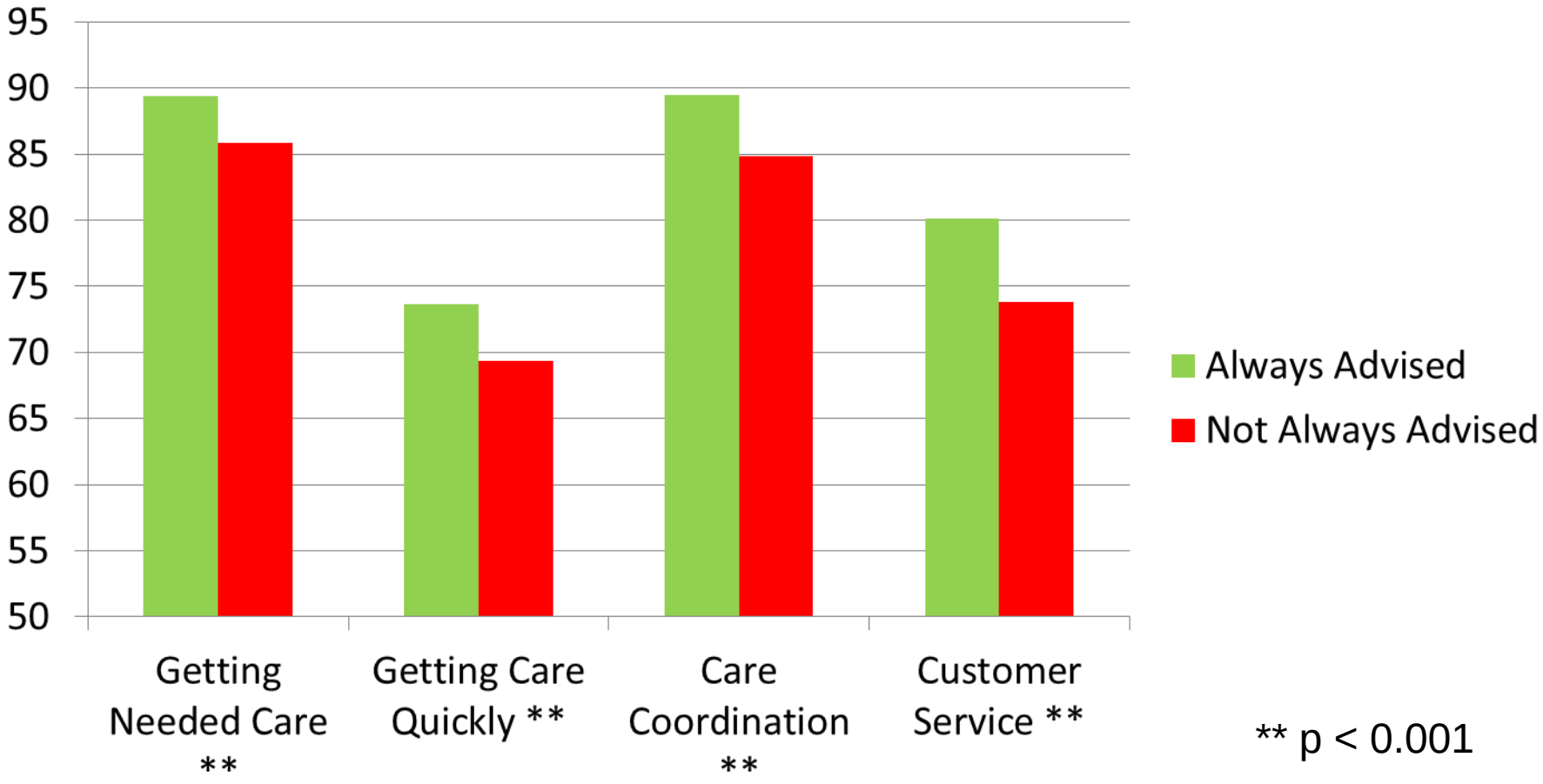
Differences for all groups shown are significant at $p < 0.05$

Ratings of Patient Experience are Higher for those Advised to Quit



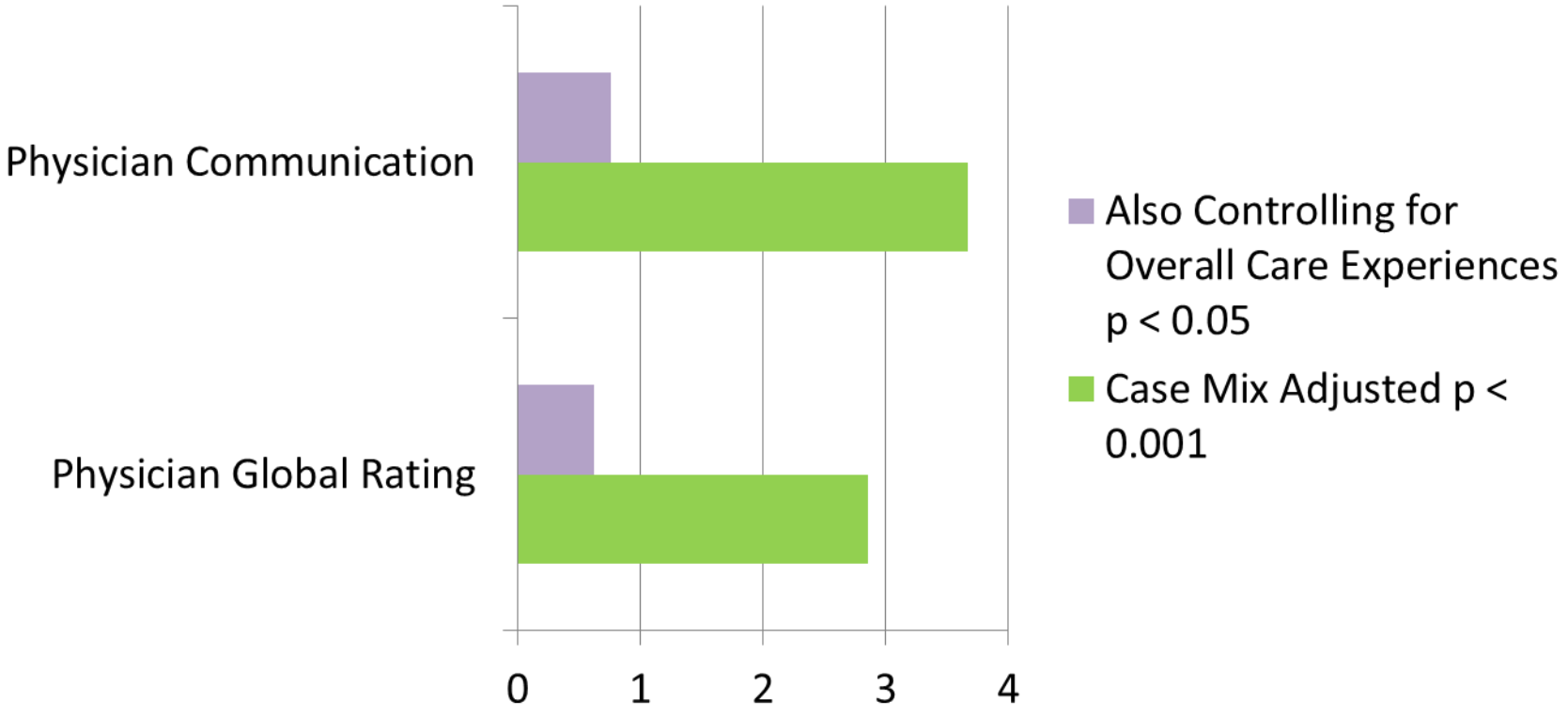
* P < 0.005

Patient Experience Composites are Higher for those Advised to Quit



** p < 0.001

Patient Experience with Physician Higher Scores when Always Advised to Quit



Summary

- Less than 40% of Medicare Beneficiaries who Smoke are Advised to Quit at every visit
  - More likely to be Advised to Quit: Women, Younger, Black & Hispanic
  - Much geographic variation
- Always being Advised to Quit Smoking is associated with Better reports of Patient Experience across all domains of health care
- Reports of Experiences *with Physicians* are still Higher for those Always Advised to Quit Smoking but effects are ~80% smaller once experiences with other domains of care are accounted for

Conclusions

- This study strengthens the evidence that providing smoking cessation advice to smokers at every visit does not negatively affect patient experience reports

- Our results further suggest that the majority of the positive association is because patients receiving advice to quit smoking report receiving better care in all domains

- Once comparing patients with similar experiences in other domains, the specific association of advice to quit with reports of *physician experiences* is still positive but small

Policy Implications

- **No Evidence to support Provider's Concerns** of potential negative patient experience ratings when giving potentially unwelcome medical advice
  - Providing regular advice to quit smoking
  - Not providing opioids to those who are addicted (Sjoerd et al. 2014, Maher et al. 2014)
  - Not receiving expected antibiotics when explained (Mangione-Smith et al. 1999, Linder & Singer 2003)

- **No Evidence to support Policy-maker Concerns** of perverse incentives of pay-for-performance

Patient Experience, Technical Quality, and Mortality

- Replication, in Veteran's Administration, of New Hampshire study (Fremont et al.) with better health status measures and measures of the technical quality of care

- Hypothesis:
  - Patient-centered care will be positively associated with survival, after controlling for technical quality and patient characteristics

- Additional analyses:
  - Is patient-centered care related to readmission?

Source: Meterko, Wright, Lin, Lowy, Cleary; HSR 2010.

Sample

- National US sample of 1,858 veterans hospitalized for an acute myocardial infarction (AMI) in 2003 or 2004

- Patients treated in 128 VA facilities

Data Sources

- External Peer Review Program (EPRP)
  - Data from medical records used to calculate VA quality indicators
  - All AMI patients included

- Survey of Health Experiences of Patients (SHEP)
  - Picker inpatient survey items
  - SF12 functional status measure
  - Health behaviors (smoking, alcohol use)
  - Socio-demographic characteristics
  - Monthly random samples from every VHA facility
  - 66% response rate

- During 2003 and 2004, cases selected for EPRP automatically included in SHEP sample

Patient Sociodemographic Characteristics

- Age (mean = 68)
- Gender (98% male)
- Educational attainment (57.7% HS or less)
- Marital status (58.6% married)
- Race (85.9% Caucasian)
- Income (85.9% 30k or less)
- Employment status (16.1% employed)

Patient Clinical Characteristics

- Highest serum creatinine during hospitalization
- Heart rate at admission
- Blood pressure at admission
- Pain within 24 hours of admission (types of pain experienced: Chest, radiating, pressure)
- History of cancer
- History of lipid disorders or on lipid-lowering medication prior to hospitalization
- History of congestive heart failure (CHF)
- History of dementia

Technical Quality of Care

- Proportion of procedures/treatments appropriate to the patient's condition (maximum = 14) that were administered

Patient-Centered Care

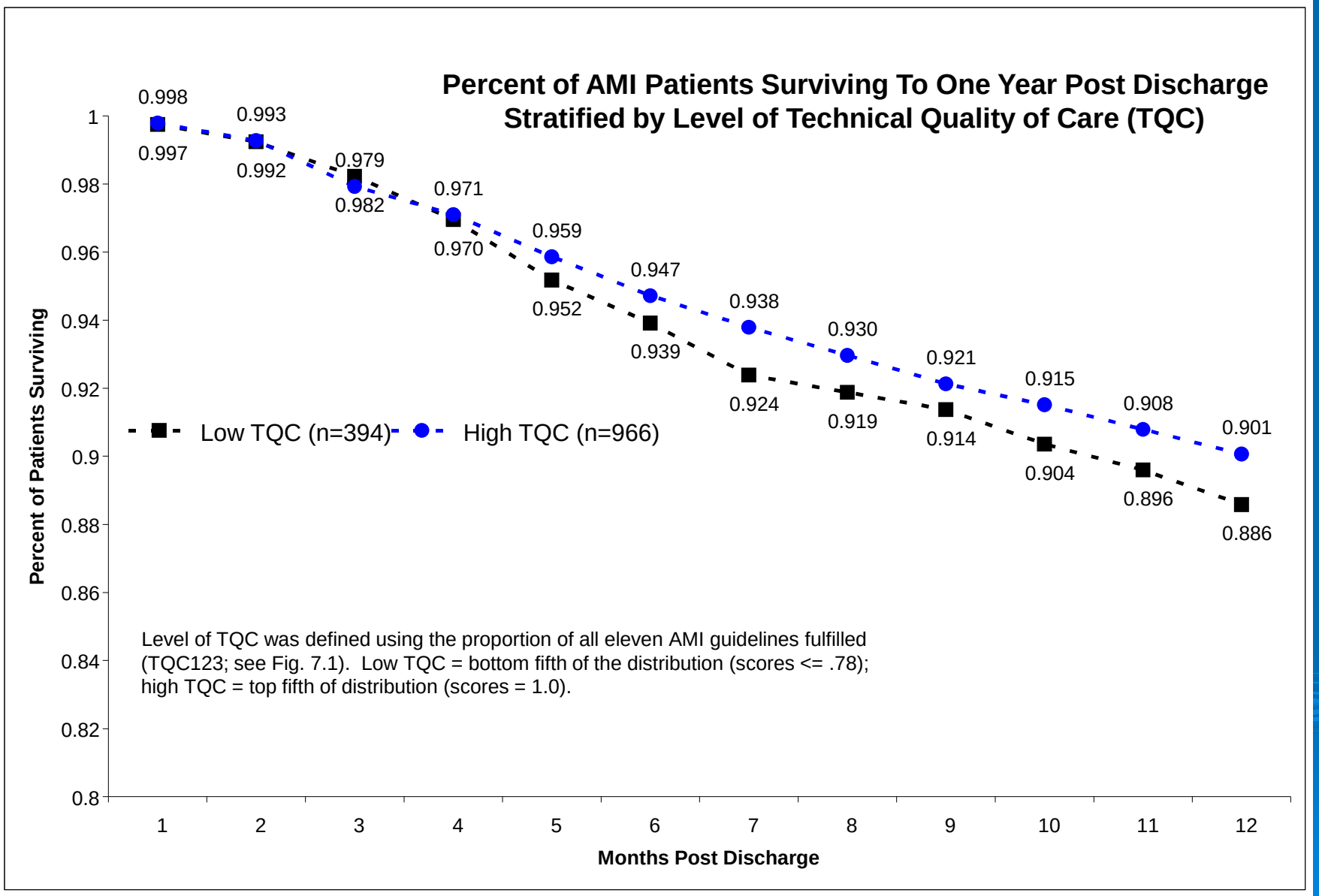
- Average of nine specific dimension scores from Picker inpatient survey
  - Each dimension score based on several survey questions
  - Each dimension score ranges from 0-100 such that higher scores = greater degree of patient-centered care

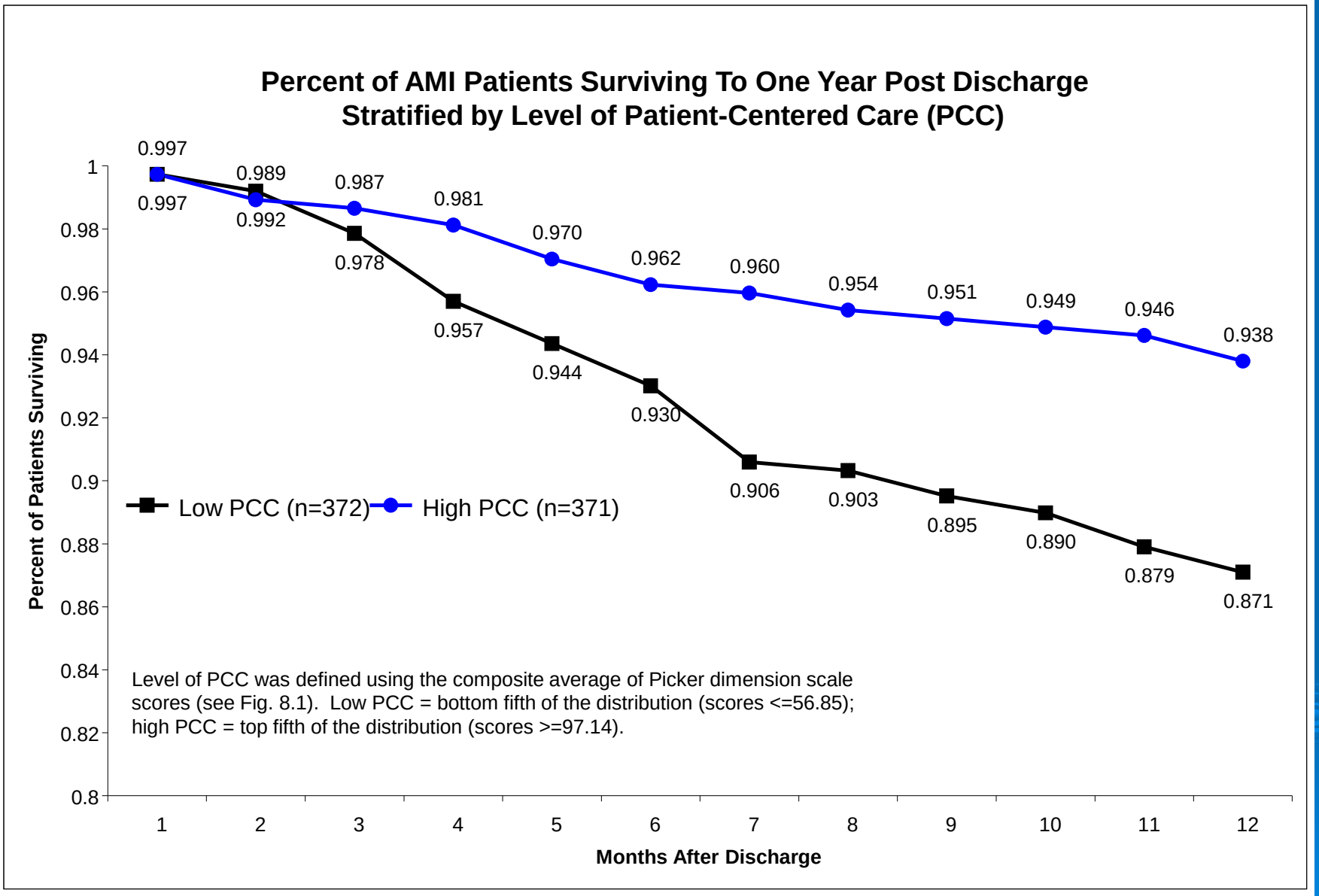
Inpatient Survey Domains

- Access
- Courtesy
- Emotional Support
- Patient Education
- Coordination
- Patient Preferences
- Family Involvement
- Physical Comfort
- Transition to Outpatient
- Overall Quality
- Intent to Return

Survival

- 90 patients (5%) died within 6 months of admission
- 175 (9%) died within 1 year of admission


Percent of AMI Patients Surviving To One Year Post Discharge
Stratified by Level of Technical Quality of Care (TQC)
Percent of Patients Surviving
Months Post Discharge
Low TQC (n=394)
High TQC (n=966)
0.998
0.993
0.979
0.971
0.959
0.947
0.938
0.930
0.921
0.915
0.908
0.901
0.997
0.992
0.982
0.970
0.952
0.939
0.924
0.919
0.914
0.904
0.896
0.886
Level of TQC was defined using the proportion of all eleven AMI guidelines fulfilled (TQC123; see Fig. 7.1). Low TQC = bottom fifth of the distribution (scores <= .78); high TQC = top fifth of distribution (scores = 1.0).


Percent of AMI Patients Surviving To One Year Post Discharge
Stratified by Level of Patient-Centered Care (PCC)
Percent of Patients Surviving
1
0.98
0.96
0.94
0.92
0.9
0.88
0.86
0.84
0.82
0.8
0.997
0.989
0.987
0.981
0.970
0.962
0.960
0.954
0.951
0.949
0.946
0.938
0.997
0.992
0.978
0.957
0.944
0.930
0.906
0.903
0.895
0.890
0.879
0.871
Low PCC (n=372)
High PCC (n=371)
Level of PCC was defined using the composite average of Picker dimension scale scores (see Fig. 8.1). Low PCC = bottom fifth of the distribution (scores <=56.85); high PCC = top fifth of the distribution (scores >=97.14).
1
2
3
4
5
6
7
8
9
10
11
12
Months After Discharge

Prediction of 1 Year Mortality

- Cox proportional hazards model
- Hazard ratios that were significant:

– Patient-centered care	0.992*
– Age at admission	1.034**
– Highest creatinine level	1.135**
– History of cancer	1.900**
– History of CHF	2.507**
– History of dementia	1.722*

* P < 0.05; ** p < 0.01

Prediction of 1 Year Mortality

- Cox proportional hazards models
- Individual Picker dimensions as predictors in separate models
  - Access: 0.994*
  - Courtesy: 0.995
  - Emotional Support: 0.996
  - Patient Information: 0.996
  - Coordination: 0.992**
  - Patient Preferences: 0.993**
  - Family Involvement: 0.997
  - Physical Comfort: 0.989**
  - Transition to Outpatient: 0.999

Summary

- Patient-centered care had a statistically significant protective effect, controlling for technical quality of care, patient demographics, patient co-morbidities, and process of care

- This effect appears to be driven by four dimensions of patient-centered care:
  - Access
  - Coordination
  - Attention to Patient Preferences
  - Physical Comfort

Reanalysis of Association of Patient Experiences and Mortality

- Fenton and colleagues (2013) found better patient ambulatory care experiences associated with much **higher** mortality rates
  - Used CAHPS items from the Medical Expenditure Panel Survey (MEPS)
- This led some to question the value of patient-centered care
- This finding contradicted a majority of studies on the same topic

Source: Xu, Buta, Price, Elliott, Hays, Cleary; HSR 2014

Association of Patient Experiences and Mortality: Concerns

- Validity
  - Effect was implausibly large; good patient experience claimed to be more dangerous than major chronic conditions
  - Only some deaths can be prevented or delayed by medical care; effect should only be seen on amenable deaths
- Timing
  - Patient experiences with care vary over time and the relationship may be sensitive to when assessments are conducted
- Confounders/Direction of causality
  - Unadjusted patient-level associations may be driven by other factors, such as poor health
  - Elliott et al. (2013 in JAGS) found better patient experience/more intensive care in last year of life

Patient Experiences and Mortality: Methods

- Used 2000-2005 Medical Expenditure Panel Survey data linked to National Health Interview Survey and National Death Index (same data Fenton et al. used)
- Cox proportional hazards models with mortality as the dependent variable and patient experience measures as independent variables and assessed consistency of experiences over time
- Unlike Fenton:
  - Divided data into non-amenable and amenable deaths
  - Considered timing of patient experience and death
  - Disaggregated the composite into individual items to better understand the association of experience and mortality

Patient Experiences and Mortality: Non-Amenable vs. Amenable Deaths

Patient Care Experience	Non-Amenable Mortality		Amenable Mortality	
	Hazard Ratio	p-value	Hazard Ratio	p-value
Quartile 1 (reference)	(1.00)		(1.00)	
Quartile 2	1.07	0.56	1.27	0.25
Quartile 3	0.96	0.70	1.28	0.25
Quartile 4 (most positive)	1.26	0.03	1.23	0.32
Overall p-value for patient care experience quartiles		0.03		0.59

Patient Experiences and Mortality: Patient Experiences Vary Over Time

- Both studies used MEPS Round 2 as the baseline
  - CAHPS items were next asked in Round 4, 1 year later
- Patients were followed up 3 months to 6 years after the baseline measure of patient experience
  - More than half of deaths occurred more than 2 years after baseline care assessment
- Patients' health care experiences varied across rounds
  - Among those with best (quartile 4) experiences at baseline, more than half had worse experiences 1 year later
- Examined the association between patient experiences and mortality among patients with consistent experiences at baseline and 1 year later

Patient Experiences and Mortality: Significant for Only One Measure

Patient Care Experience (from Medical Expenditure Panel Survey)	All-Cause Mortality	
	Hazard Ratio	p-value
Explain things in a way that was easy for you to understand †	1.09	0.17
Listen carefully to you †	0.98	0.76
Show respect for what you had to say †	1.05	0.44
Spend enough time with you †	1.17	0.03
Rating of healthcare ‡	1.10	0.15

† "Always" versus "Never"/"Sometimes"/"Usually"

‡ Rating of healthcare 9-10 versus 0-8

Summary

- Fenton et al. was inconsistent with many other studies
  - Some have interpreted it as indicating that meeting patient needs results in expensive and dangerous treatment decisions
- A re-analysis of these data found that only patients who received more of a physician's time were more likely to die, and only for deaths that were not amenable to medical care
  - It is more likely that this reflects intensive end-of-life care

Conclusions

- Patient experience surveys such as CAHPS assess important dimensions of care for which patients are the best or only source of information
- CAHPS surveys provide valid and reliable measurement of this dimension of care that providers can, and do, improve
- Improving patient experience does not lead to inappropriate and inefficient care or result in trade-offs with high-quality clinical care
- Using standardized data collection and analysis procedures, patient scores can be fairly compared